

WHAT IS CLAIMED IS:

1. An optical module comprising:

a body including an optical element;

an optical component including a nonmetallic ferrule.

5 and a metallic holder for securing a part of the ferrule;

and

a sleeve positioned to the body, the sleeve securing a part of the holder to position the holder relative to the body.

10 2. The optical module according to claim 1, wherein the holder has a tubular shape.

3. The optical module according to claim 1, wherein

the ferrule comprises a first portion having a first diameter and a second portion having a second diameter 15 smaller than the first diameter, the holder securing the second portion of the ferrule.

4. The optical module according to claim 1, wherein the ferrule is made of zirconia.

5. The optical module according to claim 1, wherein

20 the optical element includes a semiconductor light-emitting device.

6. The optical module according to claim 5, wherein

the body includes a package having a first base made 25 of metal and a second base made of ceramics, the semiconductor light-emitting device being installed on the

first base.

7. The optical module according to claim 5, further comprising an optical isolator provided between the ferrule and the semiconductor light-emitting device.

5 8. The optical module according to claim 5, wherein the package further includes a thermoelectric cooler, the semiconductor light-emitting device being provided on the thermoelectric cooler.

10 9. The optical module according to claim 5, wherein the package further includes a lens provided between the ferrule and the semiconductor light-emitting device.

10. The optical module according to claim 5, wherein the sleeve is welded to the body.

15 11. The optical module according to claim 1, further comprising a guide,

wherein the guide includes:

a first end having a face for abutting the holder,

a second end opposing to the first end, and

20 a hole extending from the first end to the second end for receiving the ferrule therein.

12. The optical module according to claim 11,

wherein the guide further includes a first portion having the first end and a second portion having the second end, the first portion receiving the ferrule from the first end and the second portion receiving a ferrule of an optical connector to be connected to the optical module from the

second end.

13. The optical module according to claim 12,
wherein the guide further includes a third portion in
conjunction with the first portion at a side opposite to
5 the second portion and a step located between the first
portion of the guide and the third portion of the guide,
and

wherein the third portion secures the holder and the
face for abutting the holder is provided at the step.

10 14. The optical module according to claim 11,
wherein the sleeve includes a first portion having a
first end for providing on the body of the optical module
and a second portion, and
the holder includes a first portion located in the second
15 portion of the sleeve and a second portion having a second
end for abutting the face of the guide.

15. The optical module according to claim 11, wherein
the sleeve is welded to the body.

20 16. The optical module according to claim 1, further
comprising a connector guide, the connector guide
including:

a pair of side walls;
a projections provided on each side walls; and
a front wall having a hole for inserting the ferrule
25 thereinto,

wherein the ferrule is inserted to the hole of the front

wall such that the holder abuts on an inner surface of the front wall.

17. The optical module according to claim 15, wherein the sleeve is welded to the body.